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# PET MEDICAL CHECKUP DEVICE, PET MEDICAL CHECKUP METHOD, AND NON-TRANSITORY COMPUTER READABLE RECORDING MEDIUM STORING PROGRAM

### TECHNICAL FIELD

The present disclosure relates to a device for checkup of the health of a pet such as a dog or a cat, a method for checkup of the health of the pet, and a non-transitory computer readable 10 recording medium storing a program.

### **BACKGROUND ART**

In recent years, a consciousness that a pet is not just a 15 companion animal but a "family member" becomes common, and the pet is taken care very carefully. In addition, with the prevalence of pet food having high nutritional value and vaccine, the life span of the pet is significantly increased for the past 20 years.

On the other hand, with the increase in the life span of the pet, the number of pets suffering from diseases similar to adult diseases of human beings such as obesity and diabetes is increased. Accordingly, the medical cost for the disease and injury of the pet tends to be increased. Therefore, many own- 25 ers are extremely careful with the health of the pet. As a result, there is a growing need for health support services such as nursing care and pet insurances that are popular among human beings.

Based on such a background, methods and systems for 30 examining the health of the pet are conventionally proposed. When the pet feels sick, the pet cannot tell its owner the sickness directly. Consequently, in order to protect the health of the pet, disease prevention before the pet catches a disease the disease are extremely important. Therefore, in order to detect the disease of the pet early, a plurality of methods and systems that automatically detect the disease of the pet using biological information on the pet and images of the pet have been proposed.

For example, Japanese Patent Application Laid-open No. 2002-51990 discloses a health examination system that includes a sensor, a transmission section, and a body information management section. The sensor is brought into contact with the body of the pet, and detects body information (a 45 pulse, a blood pressure, and a body temperature) on the pet. The transmission section transmits the detected body information from the sensor. The body information management section receives the body information. In this system, the information on the pet and performs abnormality detection of the body information on the pet, and transmits an emergency signal when the body information management section detects the abnormality.

In addition, Japanese Patent Application Laid-open No. 55 2009-165416 discloses a health examination system for the pet. In the health examination system, using an eye drawing section that draws the eye of the pet, the eye of the pet is drawn and the facial image of the pet is taken. Further, in the health examination system, biological data items such as the size of 60 a pupil, the temperature of the eye, and the glossiness of a nose are extracted from the facial image of the pet. Subsequently, the health examination system determines the health condition of the pet from the extracted biological data items. Note that the eye drawing section draws the eye of the bet by 65 giving stimuli such as, e.g., pictures, light, sound, and smell to the pet.

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Further, Japanese Patent No. 5142038 discloses a pet management system. In the pet management system, the health condition of the pet is determined by comparing the image of the iris of the pet taken by a camera and the health condition of the pet inputted by its owner with a database, and the determination result is reported to the owner.

## SUMMARY OF INVENTION

However, the system in each of Japanese Patent Application Laid-open No. 2002-51990, Japanese Patent Application Laid-open No. 2009-165416, and Japanese Patent No. 5142038 has required a further improvement.

In order to solve the problem, a pet medical checkup device according to an aspect of the present disclosure includes: a shooting section that shoots a moving image of a pet; a first storage section that stores the moving image of the pet shot by the shooting section; a first database that stores motion information representing a specific motion made by the pet when 20 the pet has a disease for each disease of the pet; a first determination section that determines whether or not the pet is making the specific motion represented by the motion information stored in the first database using the moving image of the pet stored in the first storage section; and an estimation section that estimates the disease of the pet based on a determination result of the first determination section.

According to the pet medical checkup device according to the aspect, it is possible to achieve a further improvement.

#### BRIEF DESCRIPTION OF DRAWINGS

FIG. 1 is a block diagram of a pet medical checkup device according to a first embodiment;

FIG. 2 is a view showing an example of information stored and "early detection of the disease" before deterioration of 35 in a disease motion characteristic database according to the first embodiment;

> FIG. 3 is a view showing an example of information stored in a second database according to the first embodiment;

FIG. 4 is a flowchart of a pet medical checkup process by 40 the pet medical checkup device according to the first embodiment:

FIG. 5 is a block diagram of a pet medical checkup device according to a second embodiment;

FIG. 6 is a flowchart of a pet medical checkup process by the pet medical checkup device according to the second embodiment;

FIG. 7 is a block diagram of a pet medical checkup device according to a third embodiment;

FIG. 8 is a view showing an example of information stored body information management section manages the body 50 in a disease motion sound characteristic database according to the third embodiment;

> FIG. 9A is a flowchart of a pet medical checkup process by the pet medical checkup device according to the third embodiment;

FIG. 9B is a flowchart of the pet medical checkup process by the pet medical checkup device according to the third

FIG. 10 is a block diagram of a pet medical checkup device according to a fourth embodiment;

FIG. 11 is a block diagram of a pet medical checkup device according to a fifth embodiment;

FIG. 12 is a view schematically showing an example of display of a display section according to the fifth embodiment; and

FIG. 13 is a view schematically showing an example of a system configuration of the pet medical checkup device according to the fifth embodiment.